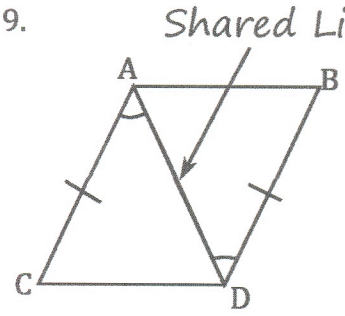
On some of these, you might need to find some hidden congruent parts. Also...some are not necessarily congruent. If they aren't, don't bubble anything. The first two are examples. Give it a go.

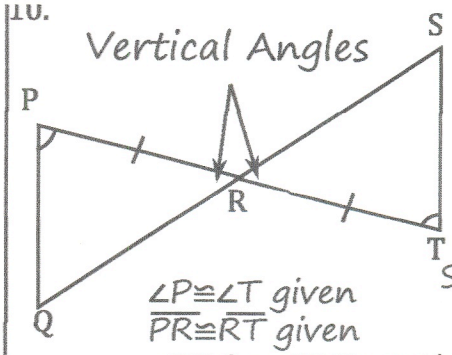
9.



$\overline{CA} \cong \overline{BD}$ given
$\angle CAD \cong \angle ADB$ given
$\overline{AD} \cong \overline{AD}$ shared line

So $\triangle CAD \cong \triangle BDA$ by SAS.

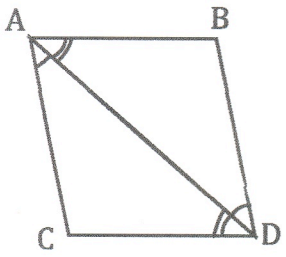
10.



$\angle P \cong \angle T$ given
$\overline{PR} \cong \overline{RT}$ given
$\angle PRQ \cong \angle SRT$ vertical

So $\triangle PQR \cong \triangle TSR$ by ASA.

11.



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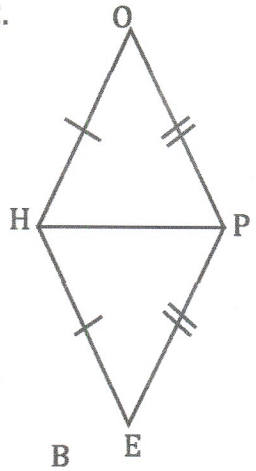
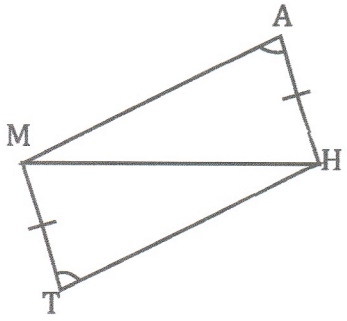


13.



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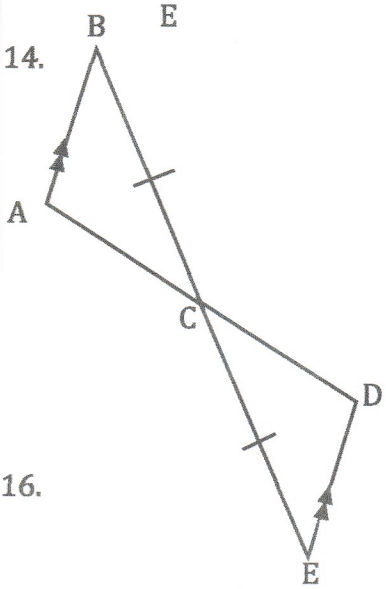

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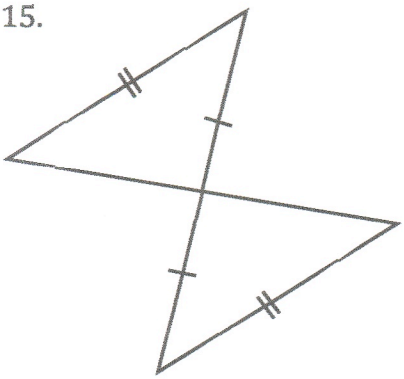
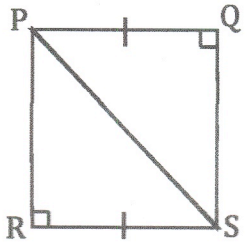


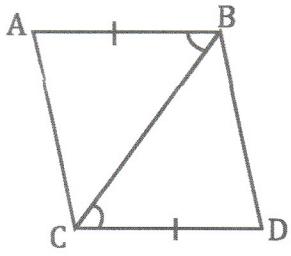
16.



Bubble the correct answer choice from each item above.

#9	#10	#11	#12	#13	#14	#15	#16
○A.	○A.	○A.	○A.	○A.	○A.	○A.	○A.
○B.	○B.	○B.	○B.	○B.	○B.	○B.	○B.
○C.	○C.	○C.	○C.	○C.	○C.	○C.	○C.
○D.	○D.	○D.	○D.	○D.	○D.	○D.	○D.

17.



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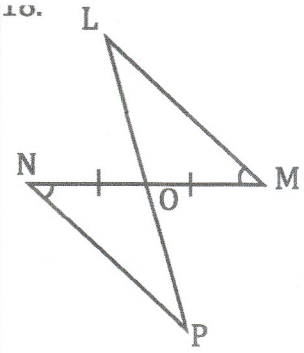

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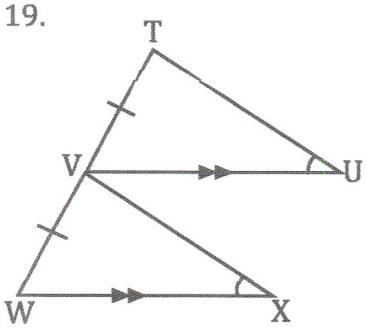

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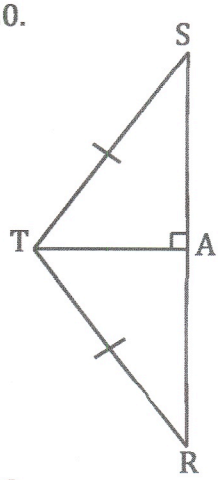

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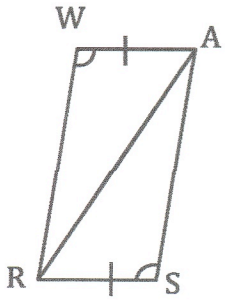
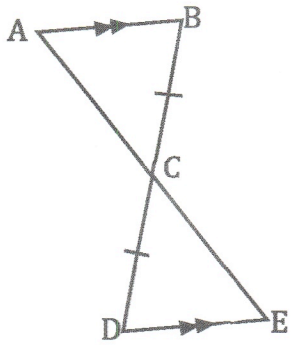
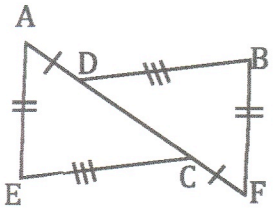


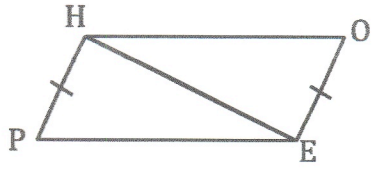
22.



23.



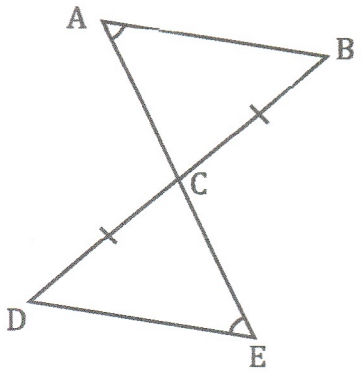
24.



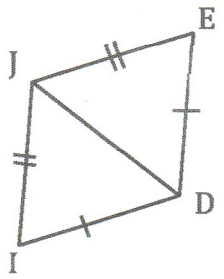
Bubble the correct answer choice from each item above.

#17	#18	#19	#20	#21	#22	#23	#24
○A.	○A.	○A.	○A.	○A.	○A.	○A.	○A.
○B.	○B.	○B.	○B.	○B.	○B.	○B.	○B.
○C.	○C.	○C.	○C.	○C.	○C.	○C.	○C.
○D.	○D.	○D.	○D.	○D.	○D.	○D.	○D.

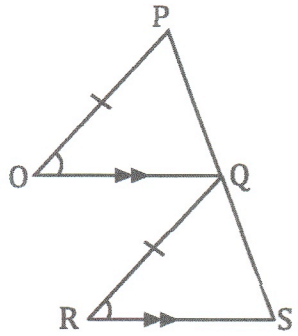
25.



26.



27.



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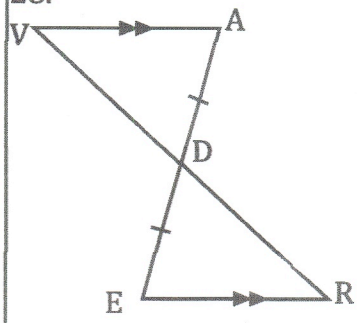

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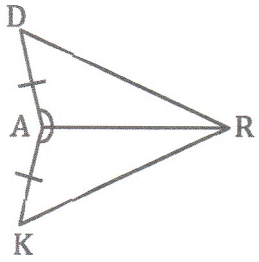
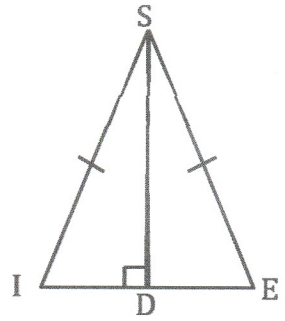
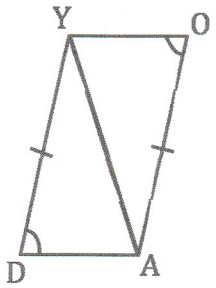


30.



31.



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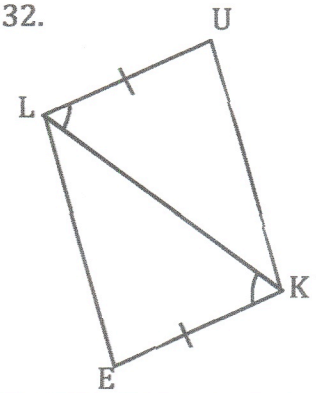


Bubble the correct answer choice from each item above.

#25	#26	#27	#28	#29	#30	#31	#32
○A.	○A.	○A.	○A.	○A.	○A.	○A.	○A.
○B.	○B.	○B.	○B.	○B.	○B.	○B.	○B.
○C.	○C.	○C.	○C.	○C.	○C.	○C.	○C.
○D.	○D.	○D.	○D.	○D.	○D.	○D.	○D.

NAME _____ DATE _____ PERIOD _____

5-6 Skills Practice

4.4Blue

ASA and AAS

Write a congruence statement for each pair of triangles represented.

1. In $\triangle ABC$ and $\triangle ZXR$, $\angle C \cong \angle X$, $\angle A \cong \angle Z$, and $\overline{AB} \cong \overline{ZR}$.

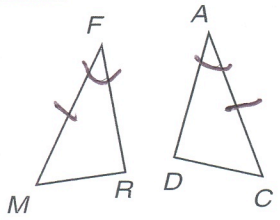
2. In $\triangle DEF$ and $\triangle BGO$, $\angle D \cong \angle B$, $\angle E \cong \angle O$, and $\overline{DE} \cong \overline{BO}$.

3. In $\triangle TRI$ and $\triangle GAN$, $\angle T \cong \angle A$, $\overline{TI} \cong \overline{AG}$, and $\overline{TR} \cong \overline{AN}$.

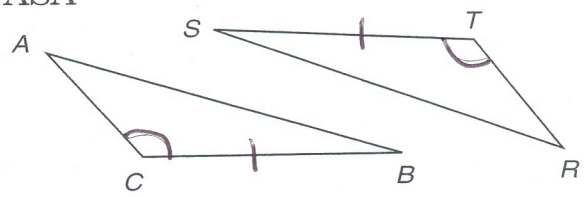
4. In $\triangle ZIP$ and $\triangle LOS$, $\angle P \cong \angle O$, $\angle I \cong \angle L$, and $\overline{PI} \cong \overline{OL}$.

Name the additional congruent parts needed so that the triangles are congruent by the postulate or theorem indicated.

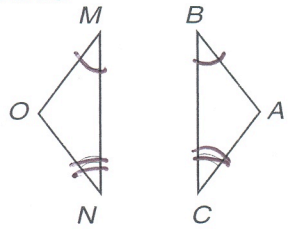
5. AAS



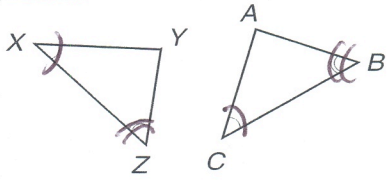
6. ASA



7. AAS

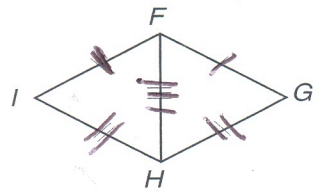


8. ASA

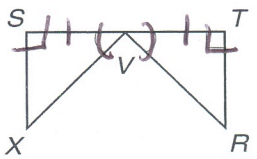


Determine whether each pair of triangles is congruent by SSS, SAS, ASA, or AAS. If it is not possible to prove that they are congruent, write **not possible.**

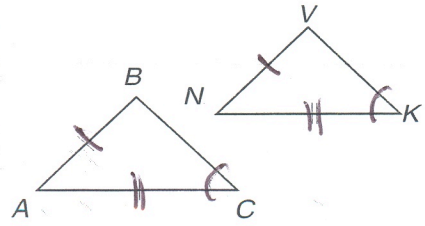
9.



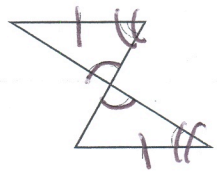
10.



11.

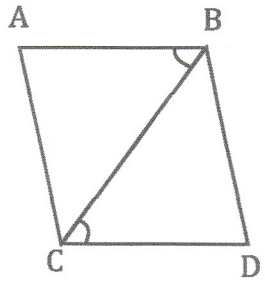


12.



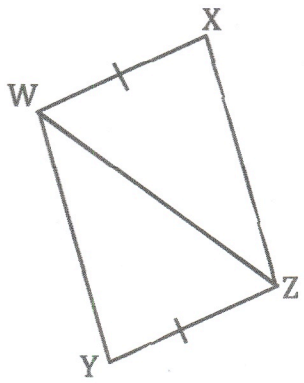
What additional information is needed to show the triangles are congruent by the given property?

1. SAS



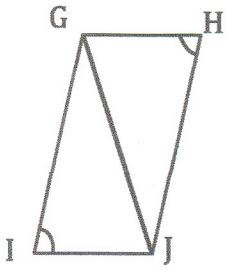
A. $\overline{AC} \cong \overline{CD}$
B. $\angle A \cong \angle D$
C. $\overline{AB} \cong \overline{CD}$
D. $\angle ABC \cong \angle DBC$

2. SSS



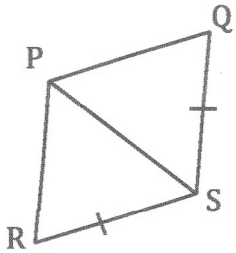
A. $\overline{XZ} \cong \overline{YW}$
B. $\angle X \cong \angle Y$
C. $\overline{YZ} \cong \overline{XZ}$
D. $\overline{WZ} \cong \overline{XZ}$

3. AAS



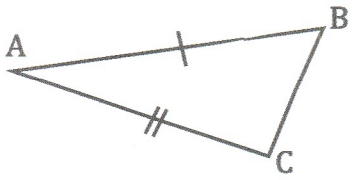
A. $\angle IGJ \cong \angle HGI$
B. $\overline{IG} \cong \overline{HJ}$
C. $\angle IGJ \cong \angle HJG$
D. $\angle HJG \cong \angle HGJ$

4. SAS

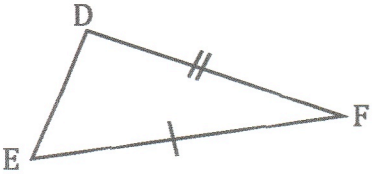


A. $\angle QPS \cong \angle SQP$
B. $\angle QSP \cong \angle RSP$
C. $\angle QSP \cong RPS$
D. $\angle R \cong \angle Q$

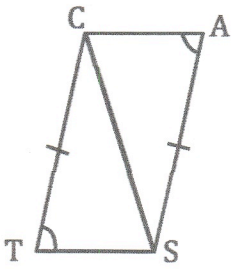
5. SAS



A. $\angle A \cong \angle E$
B. $\angle C \cong \angle D$
C. $\angle B \cong \angle E$
D. $\angle A \cong \angle F$

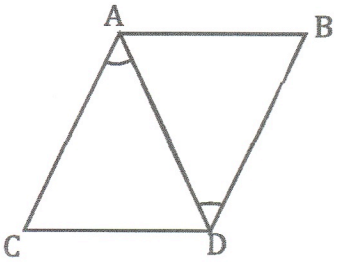


6. SAS



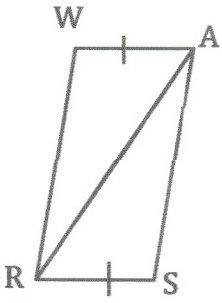
A. Nothing
B. $\angle TCS \cong \angle ASC$
C. $\angle A \cong \angle T$
D. $\angle TSC \cong \angle ACS$

7. AAS



A. $\angle C \cong \angle B$
B. $\overline{CD} \cong \overline{AB}$
C. $\angle BAD \cong \angle ABD$
D. $\angle C \cong \angle BDA$

8. SSS

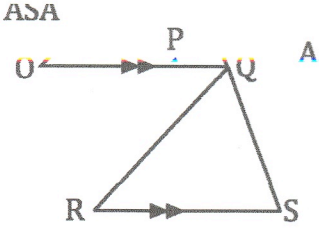


A. $\overline{WR} \cong \overline{AR}$
B. $\overline{AS} \cong \overline{AR}$
C. $\overline{WR} \cong \overline{AS}$
D. $\angle RAS \cong \angle ARW$

Bubble the correct answer choice from each item above.

#1	#2	#3	#4	#5	#6	#7	#8
○A.	○A.	○A.	○A.	○A.	○A.	○A.	○A.
○B.	○B.	○B.	○B.	○B.	○B.	○B.	○B.
○C.	○C.	○C.	○C.	○C.	○C.	○C.	○C.
○D.	○D.	○D.	○D.	○D.	○D.	○D.	○D.

9. ASA

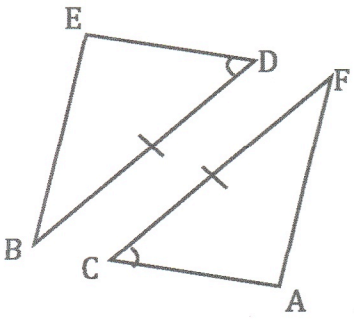


A. $\angle POQ \cong \angle QSR$

10. SAS

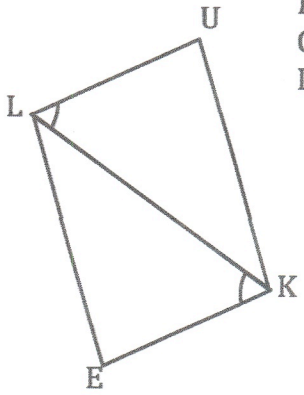
A. $\overline{BD} \cong \overline{AC}$

11. AAS



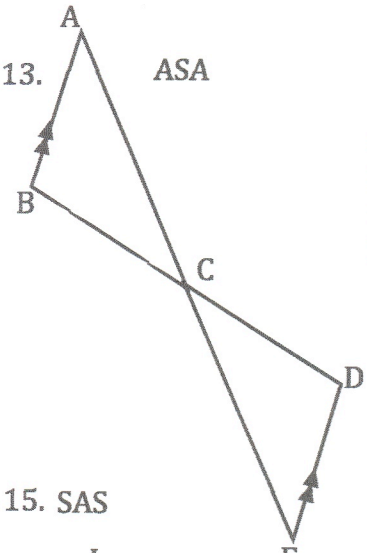
A. $\angle F \cong \angle B$
B. $\angle E \cong \angle A$
C. $\angle E \cong \angle B$
D. $\angle B \cong \angle A$

12. ASA



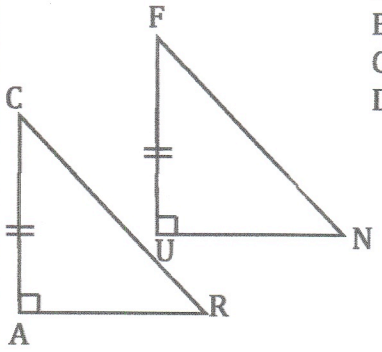
A. $\angle U \cong \angle E$
B. $\angle ELK \cong \angle UKL$
C. $\angle U \cong \angle ELK$
D. $\overline{LU} \cong \overline{EK}$

13. ASA



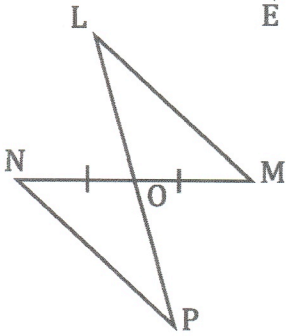
A. $\overline{AC} \cong \overline{ED}$
B. $\overline{AB} \cong \overline{CD}$
C. $\overline{AC} \cong \overline{EC}$
D. $\angle A \cong \angle E$

14. HL



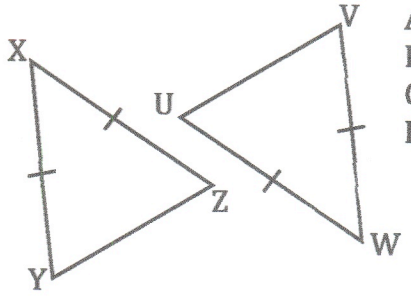
A. $\overline{AR} \cong \overline{UN}$
B. $\overline{CR} \cong \overline{UN}$
C. $\overline{CR} \cong \overline{FU}$
D. $\overline{CR} \cong \overline{FN}$

15. SAS



A. NM bisects LP
B. $\overline{NP} \cong \overline{LM}$
C. $\overline{NP} \cong \overline{LO}$
D. $\overline{LP} \cong \overline{MN}$

16. SSS



A. $\angle X \cong \angle W$
B. $\angle Y \cong \angle V$
C. $\overline{YZ} \cong \overline{VU}$
D. $\overline{YZ} \cong \overline{XZ}$

Bubble the correct answer choice from each item above.

#9	#10	#11	#12	#13	#14	#15	#16
○A.	○A.	○A.	○A.	○A.	○A.	○A.	○A.
○B.	○B.	○B.	○B.	○B.	○B.	○B.	○B.
○C.	○C.	○C.	○C.	○C.	○C.	○C.	○C.
○D.	○D.	○D.	○D.	○D.	○D.	○D.	○D.